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ANZ
DATA



Data to 31 December 2019

43rd ANNUAL REPORT

Australia and New Zealand
Dialysis and Transplant
Registry (ANZDATA)

2020

Acknowledgments

ANZDATA Registry offers its most grateful appreciation to everyone who helped make this 43rd Annual Report possible, especially the people living with end stage kidney disease whose willingness to share their data helps us better understand and improve the outcomes of renal replacement therapy in Australia and Aotearoa New Zealand. The Registry wishes to thank the staff of all the Renal Units and Tissue Typing Laboratories, upon whose reporting of data this enterprise ultimately depends.

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Kidney Health Australia



Supported by

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Unrestricted Research Grant

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Forward

The ANZDATA Registry has great pleasure in presenting the 2020 Annual Report. This is the 43rd Annual Report from the Registry and covers data collected to 31st December 2019.

The Report is a result of the involvement of all renal units throughout Australia and New Zealand and reflects enormous time and effort from staff of these units. This is a remarkable record, and testimony to all renal units, nephrologists, renal nurses and other staff throughout Australia and New Zealand. Despite increasing numbers of dialysis and transplant patients, the improvement in timeliness of data returns continues.

The evolution in report format continues, under the guidance of Dr Matthew Sypek. In addition to the report itself, substantial tabular data is placed online in the Appendices. All the tables and figures are also available from our website in PowerPoint and Excel formats.

There have been substantial contributions made to the report by various staff members within the ANZDATA Registry. Ms Kylie Hurst, General Manager of the ANZDATA Registry, plays a pivotal role in overseeing the data collection and operations of the Registry. Dr Chris Davies, Dr Gabriella Lincoln, our biostatisticians, drive the production of content for the report. Many chapters also have specific input from Working Groups, the chairs of these groups in particular, make a major contribution to their areas. Professor Alan Cass oversees the role as the Chair of the ANZDATA Registry Advisory Committee. His enthusiasm and ongoing interest in the Registry and its operations and output are pivotal to the success of the Registry. In January 2021 he was named as an Officer in the Order of Australia – wonderful recognition for his work.

The members of the ANZDATA Registry Committees and Working Groups are listed on page vii of this report. The Executive gratefully acknowledges the involvement and contribution of these many individuals.

On the research front, funded by NHMRC and other grants, activity continues to steadily grow. Key developments in 2019 span

- 1) trials a pilot program for the SWIFT trial (examining the impact of Patient Reported Outcome Measured on quality of life), continuation of 4 other Registry based trials
- 2) development of consumer-oriented material, and increasing engagement with our consumer representatives across Registry activities
- 3) engagement with groups to ensure Registry information is used to inform policy and practice. Examples of areas of particular activity are transplant allocation protocols; the establishment and work of the National Indigenous Kidney Transplantation Taskforce; and the work around pregnancy and CKD.

Major funding for the Registry has been provided from the Australian Commonwealth Department of Ageing through the Australian Organ and Tissue Donation and Transplant Authority, Kidney Health Australia and the New Zealand Ministry of Health.

The Registry has been based at the South Australian Health and Medical Research Institute since 2016; this was a successful move to a supportive environment. In addition to ANZDATA, the operations of the Australia and New Zealand Organ Donation Registry, the Living Kidney Donor Registry and the Eye and Tissue Data Collection are also managed under the same arrangements.

We also gratefully acknowledge industry support which in 2020 consisted of a non-tied grant from Astellas. Research funding was also received from Baxter (Investigator-initiated grant) and NHMRC (as part of a Program Grant to the Beat-CKD consortium).

Stephen McDonald

Executive Officer 2021

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Patient Reported Outcome Measures (PROMs)

Guidelines for Data Release

In 2017 ANZDATA undertook an extensive review and revision of its policies and procedures, including those related to data release. The latest versions of these policies and procedures are available at our website:

http://www.anzdata.org.au/v1/policies_procedures.html

The following are our current data release principles. Please see our website for more information on how to request data from ANZDATA.

- *Encourage data use*
 - *Data extracts will be made available to contributors of ANZDATA on request, provided evidence of appropriate expertise for analysis/interpretation is shown by the requestor.*
- *Encourage efficiency*
 - *Where adequate for a project, release of aggregate data (group level), is preferred to the release of individual line data.*
 - *Only data fields required for analysis of the issues / questions identified in any given request will be released.*
- *Protect data integrity*
 - *Data sets released are only approved for use in the specified project, subsequent use for other projects will require further approval in consultation with the registry.*
 - *Where individual line datasets are provided, responsibility for design, conduct and interpretation of analyses lies with the requestor. A disclaimer should be included in any publications arising from these data sets.*
 - *Details of the database structure are available in the data set specification documents and ANZDATA are available to explain the structure of the data set.*
 - *Although much effort is put into collecting and recording data accurately, as in any large database, there may be occasional errors, for which ANZDATA does not take responsibility.*
- *Transparency*
 - *ANZDATA will keep and show on its website a list of the data requests (the name of the requestor and the title).*
 - *Where a subsequent request is received for a similar or overlapping area we will endeavour to identify requestors with similar or overlapping proposals, but cannot guarantee to do so.*
 - *Where there are overlapping requests, data will not be released for the subsequent request within 6 months of provision of data for the original request.*
- *Prioritize contributors and funders*
 - *Priority for data access is given to ANZDATA contributors and funders. Where requests are received from external parties, collaboration with a contributor is strongly encouraged.*
 - *Identification of a local contributor is essential for release of identified individual line datasets – this person then acts as the “guarantor” of appropriate use and interpretation of the data and analyses.*
 - *For release of New Zealand individual line datasets, involvement of a New Zealand ANZDATA contributor is highly desirable and consultation with Māori may be appropriate.*
 - *Individual line data will not be released to corporations. Where requests are received, these analyses are performed “in-house”. These are generally performed on a cost recovery basis, taking into account other contributions to the Registry.*
- *Ensure ethical research practices*
 - *The requirement for ethics committee approval depends on the nature of the project. For many clinical audits or similar projects this will not be required, but is often appropriate for research studies.*
 - *Formal ethics approval and oversight is mandatory for data linkage studies.*
 - *Where the need for ethics oversight is unclear, the requestor will be asked to seek advice from their local health research ethics committees, external to ANZDATA.*

- *Recognise custodianship of linked data from external sources*
 - *Australian transplant waiting list and some other transplant data are supplied by National Organ Matching Service (NOMS). Approval for use of this data outside the terms stipulated in the joint memorandum of understanding is required from NOMS, in addition to ANZDATA.*
 - *New Zealand transplant waiting list and some other transplant data are supplied by the New Zealand Blood Service (NZBS). Approval for use of this data outside the terms stipulated in the joint memorandum of understanding is required from the New Zealand Transplant Leadership Team, in addition to ANZDATA.*

Attribution of Publications

Where a member of a participating unit has analysed data provided by ANZDATA and subsequently prepared a manuscript, then “ANZDATA Registry” should be acknowledged as a secondary institution in addition to the author’s Hospital or University. This applies whether the primary data analysis is performed by the author or by ANZDATA staff. Where the author is an ANZDATA office holder or staff member then the primary attribution should be “ANZDATA Registry”.

Where ANZDATA data is only a minor portion of the work, then it may be more appropriate to acknowledge the source explicitly in the “Acknowledgements” section.

In both cases the disclaimer on below of this report should be included.

In all cases the source and treatment of the data should be made clear in the “Methods” section. Preferably the abstract (and keywords if applicable) should also include “ANZDATA” which would allow for searching Registry publications.

Suggested Citation

An example of suggested citation for this report is as follows:

ANZDATA Registry. 43rd Report, Chapter 5: Peritoneal Dialysis, Australia and New Zealand Dialysis and Transplant Registry, Adelaide, Australia. 2020. Available at: <http://www.anzdata.org.au>

Requests of Additional Data Not Included in the Annual Report

ANZDATA is committed to acting in accordance with Australian and New Zealand national privacy principles, and is open and transparent about the collection, management and usage of information. Details regarding the principles and policies guiding data requests to the Registry can be found at <https://www.anzdata.org.au/anzdata/services/data-policies/>.

Publications based upon ANZDATA Registry information reported here or supplied upon request, must include the citation as noted above and the following notice:

The data reported here have been supplied by the Australia and New Zealand Dialysis and Transplant Registry. The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.



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ANZDATA Information Sheet

Introduction – Why are you being given this Information Sheet?

You are receiving dialysis or a kidney transplant. This means your health information can be collected by ANZDATA. This information sheet explains what ANZDATA does, and why information about you is being collected by ANZDATA.

What is ANZDATA and what does it do?

“ANZDATA” stands for The Australia and New Zealand Dialysis and Transplant Registry. ANZDATA collects information (data) about the health of all people (adults and children) in Australia and New Zealand who have kidney failure and have either dialysis or a kidney transplant.

ANZDATA is paid for by the Australian and New Zealand Governments, Kidney Health Australia and the Australia and New Zealand Society of Nephrology, and has one office that is located in Adelaide.

How does ANZDATA collect and store my information?

Every year, your hospital completes a survey about your health and kidney failure treatment and sends this information to ANZDATA either by computer or by post. ANZDATA keeps this information about you and your kidney treatment in a highly protected computer network in South Australia. There is a lot of security in place to protect your information.

What information does ANZDATA collect about me?

Your hospital gives ANZDATA your name, postcode, date of birth, gender, ethnic background (your race), and information about your health conditions (what diseases you have), details about the type of kidney treatment you are receiving (dialysis or transplant) and some of your test results and medications. This information is collected when you start dialysis or have a transplant, and then every year. Sometimes, extra information will be collected during the year as well if something important happens to you. We DO NOT collect other personal details about your address, telephone number, Medicare number, medical insurance, or non-medical matters such as occupation or income.

How does ANZDATA use my information?

The information collected by ANZDATA is used for many different things. Here are the main ways we use your information.

1. Making reports with the latest information about patients with kidney failure
2. Sending reports back to each hospital and telling them how their patients are doing NOW compared to the past, and also compared to other hospitals
3. Understanding the quality, type and place of care people receive
4. Understanding the type of kidney disease people get, and how they are treated
5. Understanding how many people have kidney failure and what health care they need, so that the best health care services can be set up to look after them
6. Helping people do research so they can understand more about kidney failure and the best ways to treat it and keep patients healthier.

What will happen if I agree to share my information with ANZDATA?

You do not have to do anything more. Your hospital team will fill out the forms and send them to ANZDATA. You can ask to see your own information at any time or get copies of the reports that ANZDATA make.

Do I have to share my health information with ANZDATA?

You can choose not to give your information to ANZDATA. If you decide not to join in, it will not affect the treatment you receive now or in the future, or your relationship with the staff caring for you. If you wish to pull out from ANZDATA, you can do so at any time without having to give a reason.

Does sharing health information with ANZDATA help me?

Sharing your information with ANZDATA will not directly affect your care. However, collecting information about the health and treatment of kidney patients helps hospitals make sure dialysis and transplantation is as safe as possible, and helps hospitals to learn new things that may help you or others with kidney failure in the future.

What are the risks for me if I agree to share my information with ANZDATA?

The main risk is a loss of privacy if your personal and private health information which is given to ANZDATA is viewed by an unauthorised person. Usually this information would only be seen by your doctors, nurses or health carers directly involved in your care. However, the information given to ANZDATA is kept as safe as possible (see next section). Your identity and personal details are not accessible to the public or anyone outside of ANZDATA. Any information released from ANZDATA is anonymous.

Is my information in ANZDATA kept private and safe? Who can see it?

ANZDATA follows Australian Government rules about keeping your information private and confidential. There are many security measures to make sure all the information is kept very safely. The computer systems are protected. Information is transferred in a safe and secure way.

Your identity (name and other personal information) is not released except to your own hospital unless there is specific ethical approval. ANZDATA has strict rules around who can ask for information and how they can get it. If ANZDATA information is used in research or in a report, it is always given anonymously (without your name).

Who do I contact for more information or if I have concerns?

If you have any questions or concerns about giving your information to ANZDATA at any stage, you can talk to your kidney doctor.

Contact ANZDATA by phone ((08) 8128 4758) or by email anzdata@anzdata.org.au
Find out more at our website www.anzdata.org.au

Definitions and Methods

A number of definitions given below are used throughout this report unless otherwise stated.

1. Wording

Throughout this report 'treatment' refers to renal replacement therapy, including haemodialysis, peritoneal dialysis and transplantation. In places the word "graft" (or "allograft") is used for kidney transplant.

HD = haemodialysis

CAPD = continuous ambulatory peritoneal dialysis

APD = automated peritoneal dialysis

ESKD = end stage kidney disease

2. Data collection

ANZDATA collects information from all renal units in Australia and New Zealand. Data collection occurs at two time points. Key events (new patients, deaths, transplants) are notified as they occur, with units requested to send this at least monthly. An extensive cross-sectional survey is then performed annually (for data to 31st December). Data submission can occur either via a web-based interface or paper submission. Once the data has been entered it is validated for consistency and to reduce missing values.

For kidney transplants, HLA typing and panel reactive antibodies are obtained direct from the National Organ Matching System. Monthly summaries are distributed to the contributing units. Results contained in this report are based on a final database locked and prepared after the end of year survey returns are received.

3. Inclusion criteria

Included in the Registry are all patients resident in Australia or New Zealand receiving renal replacement therapy where the intention to treat is long-term, i.e. medical opinion is that renal function will not recover. Cases of acute renal failure are excluded. People who move overseas permanently are censored at date of last treatment (or departure in the case of transplant recipients).

4. Modality attribution

For survival analysis the initial mode of dialysis is generally determined at 90 days after first treatment, to allow for early changes and maturation of access. Other transfers (between modalities, or from satellite to hospital haemodialysis etc.) are not analysed if less than 30 days, except for transfers between dialysis centres to which a 60 day rule is applied to allow for holiday movements.

5. Underlying renal disease

This is recorded by the treating hospital according to a modified EDTA coding system (details on back of survey form).

6. Deaths

Death rate is predominantly reported as number of patients died/total number of years of treatment of all patients treated at any time during the year. It is expressed as deaths per 100 patient years (pt yrs) at risk.

7. Comorbid conditions

These are recorded by the treating hospital. No formal definitions are supplied; the treating clinician is asked to record whether the patient has coronary artery disease, chronic lung disease, cerebrovascular disease, peripheral vascular disease or diabetes according to their clinical opinion on a yes / suspected / no basis.

8. Transplant Waiting List

The active transplant waiting list is based on data from the National Organ Matching System (Australia) linked probabilistically with ANZDATA.

9. Derived measures

9.1 Haemoglobin

Haemoglobin is recorded as the last available measurement before the end of the survey period.

9.2 Erythropoietic agents

Erythropoietin agent use is recorded as "yes" if these agents were used at any time during the survey period.

9.3 Iron studies

Iron studies are requested within the last three months of the survey period.

9.4 Estimated glomerular filtration rate

Where glomerular filtration rate is estimated from serum creatinine at entry or post transplantation, the CKD-EPI formula is used:

Females with Cr≤62 micromol/L: eGFR = (144 + 22 if black) × (Cr*0.0113/0.7)^{-0.329} × 0.993^{age}

Females with Cr>62 micromol/L: eGFR = (144 + 22 if black) × (Cr*0.0113/0.7)^{-1.209} × 0.993^{age}

Males with Cr≤80 micromol/L: eGFR = (141 + 22 if black) × (Cr*0.0113/0.9)^{-0.411} × 0.993^{age}

Males with Cr>80 micromol/L: eGFR = (141 + 22 if black) × (Cr*0.0113/0.9)^{-1.209} × 0.993^{age}

Where Cr is creatinine in micromol/L and age is age in years. The correction for “black” race, based on US data, is not applied to any patients.

9.5 Urea reduction ratio / Kt/V

Results are requested in one of these formats, using the stop flow method on a mid-week dialysis. Single pool Kt/V is collected, along with the method used. For conversion of URR to Kt/V urea the formula used ^[2] is Kt/V = 0.023*PRU - 0.284 (note that PRU = percent reduction in urea and not URR).

9.6 *Body mass index*
Body mass index (BMI) is calculated as $\frac{\text{weight (kg)}}{(\text{height (m)})^2}$. The categories used are : underweight <20 kg/m², normal 20-24.9 kg/m², overweight 25-29.9 kg/m². obese ≥30 kg/m²

9.7 Peritoneal dialysis measures

These are the standard measures, often calculated by computerised patient management programs.

9.7.1 Residual renal function

The measure used is the arithmetic mean of urea and creatinine clearance from a 24-hour urine collection and serum creatinine and urea.

9.7.2 Peritoneal equilibration test

The ratio of dialysate to plasma glucose is used, following a 4 hour dwell of a 2 litre 2.5% bag of dialysate, performed within 6 months after initiation of peritoneal dialysis.

10. Rates and Measures

10.1 *Incidence rates*
Except where otherwise stated, quoted incidence rates are per calendar year, and are expressed per million population.

10.2 *Prevalence rates*
Except where otherwise specified, prevalence rates are point prevalence rates at 31st December 2019.

10.3 *Population denominator*
All populations used in this report were stratified by age and sex.

Australian populations were taken from the Australian Bureau of Statistics (ABS) and New Zealand populations were taken from Stats NZ.

All estimated and projected populations used for Australia and New Zealand were for 30 June of each year, and all websites were accessed 27 December 2019 for analysis of the annual 2019 locked dataset.

Estimated population data for each Australian state and territory came from ABS 3101.0 series ⁽³⁾

Projected population data for each Australian state and territory came from ABS 3222.0 series ⁽⁴⁾

Population data for Indigenous Australians were taken from ABS 3238.0⁽⁵⁾, using series A for populations after 2011.

Populations serviced by the Greater Southern Area Health Service were estimated by the South Eastern Region of NSW. These estimates were taken from ABS 3235.0⁽⁶⁾.

All New Zealand population estimates were taken from Stats NZ Infoshare⁽⁷⁾ and population projections were taken from NZ.Stat⁽⁸⁾. Maori populations were taken from NZ Infoshare Maori population estimates⁽⁹⁾.

Estimates of resident populations by other ethnicities were taken from Stats NZ⁽¹⁰⁾ for years 2013 onwards.

10.4 Death Population Data

All Australian death data were taken from ABS 3302.0 series⁽¹¹⁾. Death data is not available for publications by age and sex on ABS website for some states. Overall data by states and territory is used. New Zealand death data were taken from NZ Infoshare⁽⁷⁾.

10.5 Survival rates

For transplant recipients, survival rates exclude those who were transplanted overseas or were recipients of multiple organ grafts.

Graft survival (unless otherwise qualified) includes both cessation of graft function (ie return to dialysis) and patient death.

Rates for patient survival for fixed periods for transplantation are calculated according to the life-table method and thus include an adjustment to the risk-set of ½ of those censored without failure over the interval to create an “average” risk set.

10.6 *Graft survival*

For outcomes of kidney transplants, graft failure includes both loss of graft function (i.e. return to dialysis) and death of patients (with graft function). Calculations of patient survival for transplant recipients includes all subsequent modalities (i.e. deaths after graft failure are included). Patients transplanted overseas are excluded from calculations.

10.7 *Dialysis Survival*

Patients are followed up until they are either transplanted (at which point they are censored) or until they have a ‘permanent’ change of dialysis modality or until death or most recent follow up date.

10.8 *Peritonitis survivals* are calculated from first peritoneal dialysis (ignoring all earlier treatments) to date of first peritonitis episode. If there were no episodes of peritonitis then calculation is censored at change of treatment from peritoneal dialysis to haemodialysis or transplantation. Peritoneal dialysis includes automated peritoneal and continuous ambulatory peritoneal dialysis. Excluded are patients who had peritonitis before commencing peritoneal dialysis.

10.9 *Death and other event rates*

Rates are expressed per 100 person years at risk (unless otherwise stated). Some analyses include survival of all patients, others exclude the first 90 days of follow up. This is stated in the individual analyses.

10.10 *Age standardisation*

All rates are crude, not age-standardised. The age distribution of the populations for Australia and New Zealand can be obtained by contacting the Registry.

10.11 *Peritonitis rates*

Peritonitis rates are present using episodes of peritonitis reported during periods of peritoneal dialysis - episodes reported prior to commencement of peritoneal dialysis (for example between Tenckhoff catheter insertion and commencement of peritoneal dialysis) are not included in these calculations.

11. Database

Data is stored on a relational database using SQL Server 2012.

12. Statistics

Statistical analyses were performed using Stata version 16.

13. References

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- Basile C, Casino F, Lopez T: Percent reduction in blood urea concentration during dialysis estimates Kt/V in a simple and accurate way. *Am J Kidney Dis* 1990; 15:40-45.
- <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Jun%202019?OpenDocument>
- [http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3222.02017%20\(base\)%20to%202066?OpenDocument](http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3222.02017%20(base)%20to%202066?OpenDocument)
- <https://www.abs.gov.au/statistics/people/population/regional-population-age-and-sex/latest-release>
- <http://archive.stats.govt.nz/infoshare/>
- <http://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7542> □
<http://nzdotstat.stats.govt.nz/wbos/Index.aspx#>

Contributing Units

Parent hospitals, transplanting unit and satellite dialysis units together with their state and unit codes are listed below.

In some cases, these have combined as part of a regional network and this is also indicated. The definition of a 'parent hospital' is a pragmatic one and refers to units which offer a full range of dialysis services (i.e. can commence patients on dialysis, have on-site nephrologist presence and can deal with patients of all degrees of complexity). In contrast, satellite units provide haemodialysis treatments to selected patients, usually with lower staff ratios and no nephrologist on site.

NOTE: The states listed below are in no particular order.

QUEENSLAND (State Code 4)			
PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Bundaberg Base Hospital	BUND	Pindara Private Hospital	PIND
Cairns Base Hospital	CAIR	Princess Alexandra Hospital	PSAH
Chermside Dialysis Unit	CHER	Queensland Renal Transplant Service	QRTS
Child and Adolescent Renal Service	CARS	Ramsey Cairns Private Hospital	RCPR
Gold Coast university Hospital	GOLD	Rockhampton Base Hospital	ROCK
Gold Cost Private Hospital	GCPR	Royal Brisbane Hospital	RBSH
Greenslopes Private Hospital	GREN	St Andrew's Private Hospital	GSTA
Hervey Bay Hospital	HERV	Nambour Selangor Private Hospital	NPRV
Ipswich Hospital	FLYN	Sunshine Coast University Private Hospital	SCPR
John Flynn Hospital	MACK	Sunshine Coast University Hospital	SCUH
Mackay Base Hospital	QMAT	The Townsville Hospital	TOWN
Mater South Brisbane Hospital	MTOW	Toowoomba Hospital	TWMB
Mater Townsville Hospital	NLKP	Wesley Private Hospital	WSLY
North Lakes Private Hospital			
SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Atherton Hospital	ATHR	Maryborough Hospital	MARY
Brookwater Dialysis Centre	MBRW	Mater Hyde Park	MHYP
Cairns Home Training Unit	CHTR	Mater Pimlico	MPML
Cairns Private Hospital Satellite	CPRV	Mossman Satellite	MOSS
Caloundra Public Hospital	CAPU	Mt. Isa Satellite	MTIS
Cooktown Satellite	COOK	Nambour General Hospital	NAMB
Dalby Hospital	DALB	Noosa Satellite	NOOS
East Street Self Care Dialysis Unit	EAST	North Lakes Dialysis Unit	NLAK
Gladstone Hospital	GLAD	North Ward Satellite	NWAR
Gold Coast In-centre unit	GCUH	Palm Island Satellite	PISL
Gold Coast Renal Home Therapies	GRHT	Redcliffe Satellite	REDC
Gympie Satellite	GYMP	Redlands Satellite	REDL
Home Hill Satellite	HILL	St Vincent's Robina Satellite	STVR
Innisfail Hospital	INNI	Thursday Island Satellite Unit	THIS
Ipswich Satellite	IPSW	Wickham Terrace Practice	WICK
Kingaroy Satellite	KROY	Woorabinda Hospital	WOOR
Logan Satellite	LOGN	Yarrabah Satellite Dialysis Centre	YRRB

TRANSPLANTING UNIT	Unit Code
Queensland Renal Transplant Service Princess Alexandra Hospital Ipswich Road, Woolloongabba 4102	QRTS Queensland Children's Hospital Stanley Street, South Brisbane 4101

SOUTH AUSTRALIA (State Code 5)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Flinders Medical Centre	FMDC	Central Northern Adelaide Transplant Service	CNAR
Women's and Children's Hospital	WCHL	Royal Adelaide Hospital	RADL

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Berri Satellite	BERI	Modbury Satellite (Fresenius)	MSAT
Brighton Dialysis Clinic	BRTN	Mount Gambier Satellite	MTGA
Ceduna Hospital	CEDU	Murray Bridge Hospital	MURR
Clare Satellite	CLAR	Noarlunga Satellite	NOAR
Gawler Health Service	GAWL	Payneham Satellite (Fresenius)	PAYN
Hampstead Home Therapies	HMHT	Port Augusta Hospital	PTAG
Hampstead Satellite	HAMP	Port Pirie Satellite	PIRI
Hartley Private Hospital (Fresenius)	HART	Queen Elizabeth Hospital Dialysis	QEHD
Port Lincoln Satellite Centre	LINC	Royal Adelaide 2C Haemodialysis Unit	RAHC
Lyell McEwin Satellite	LMCK	Royal Adelaide 7F Haemodialysis Ward	RAHF
Millicent Hospital	MILL	Victor Harbour Satellite	VHAR
Maitland Hospital	MLAN	Whyalla Satellite Unit	WHYA

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Central Northern Adelaide Transplant Service Royal Adelaide Hospital North Terrace Adelaide 5000	CNAR	Women's and Children's Hospital 72 King William Road North Adelaide 5006	WCHL

WESTERN AUSTRALIA (State Code 6)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Fiona Stanley Hospital	FSTH	Royal Perth Hospital	RLPT
Princess Margaret Hospital for Children	PMHC	Sir Charles Gairdner Hospital	SCGH

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Albany	ALBA	Kalgoorlie Dialysis Unit	KALG
Armadale Kelmscott Memorial Hospital	ARMA	Kimberley Dialysis Centre	KIMB
Bunbury Satellite	BUNB	Kununurra Dialysis Unit	KUNU
Busselton Satellite	BUSS	Midland Private Dialysis Centre (Baxter)	MIDL
Cannington Dialysis Clinic (Diavrum)	CANN	Peel Health Campus	MAND

Carnarvon Hospital	CARN	Port Hedland Dialysis Unit (Pilbara)	PTHD
Coolbellup Home Therapy Clinic	COOL	Rockingham Satellite	RHAM
Derby Satellite	DERB	Spearwood Satellite	SPEA
Fitzroy Crossing Hospital	FICR	Stirling Dialysis Clinic (Diaverum)	STIR
Geraldton Hospital	GRLD	Warbuton Western Desert Dialysis Unit	WBWD
Joondalup Satellite	JOON	Warwick Home therapy Clinic	WARW
Hedland Health Campus	HDLH		

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Princess Margaret Hospital for Children Roberts Road Subiaco 6008	PMHC	Fiona Stanley Hospital 102-118 Murdoch Drive Murdoch 6150	FSTH
Sir Charles Gairdner Hospital Verdun Street Nedlands 6009	SCGH		

NEW SOUTH WALES (State Code 2)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Bathurst Base Hospital	BATH	Mayo Private - Taree	MAYO
Coffs Harbour Hospital	COFF	Newcastle Nephrocare	NCAS
Concord Repatriation General Hospital		Port Macquarie Base Hospital	PTMQ
Dubbo Base Hospital	DUBB	Port Macquarie Private Hospital	PMPH
East Coast Renal Service		Royal North Shore Hospital	RNSH
Prince of Wales Hospital	POWH	South West Sydney Renal Services	SSYD
St. George Hospital	STGH	Liverpool Hospital	LVPL
St. Vincent's Hospital	STVI	Royal Prince Alfred Hospital	RPAH
Sydney Children's Hospital	SCHL	Sydney Adventist Hospital	SADV
Wollongong Hospital	WGNG	Tamworth Hospital	TAMW
Gosford Hospital	GOSF	The Children's Hospital at Westmead	CHWM
Griffith Base Hospital	GRIF	The Tweed Hospital	TWHD
John Hunter Hospital	HUNT	Wagga Wagga Base Hospital	WAGG
Lismore Hospital	LISM	Western Renal Network	
Lismore Private Dialysis Clinic	LPDC	Nepean Hospital	NEPN
Macleay Dialysis Centre - Kempsey	MACL	Orange Hospital	ORAN
Manning Rural Referral Hospital	MANN	Westmead Hospital	WEST
Mater Hospital	MATR		

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Armidale Hospital	ARMD	Liverpool Private Dialysis Centre	LVPR
Auburn Satellite	AUBN	Liverpool Renal Home Therapy Unit	LVHT
Ballina Hospital	BLNA	Long Jetty Renal Unit	LJRU
Bankstown Hospital	BANK	Maitland Hospital	MAIT
Bega Satellite	BEGA	Milton Ulladulla Hospital	MULD
Blacktown Regional Dialysis	BLAK	Mona Vale Satellite	MNVL
Brewarrina Hospital	BREW	Moree Hospital	MORE
Broken Hill Hospital	BROK	Moruya Satellite (Fresenius)	MORU
Campbelltown Satellite	CAMP	Murwillumbah District Hospital	MURW
Concord Repatriation Satellite Unit	CRSU	Muswellbrook	MUSW
Condobolin Hospital	COND	Nambucca Valley Dialysis Unit	NVDC
Cooma Hospital	COOM	Nita reed Community Dialysis Centre	NITA
Coonamble Hospital	COON	Norwest Private Dialysis Centre	NPDC
Cowra Dialysis	COWR	Orange Hospital	ORAN
Deniliquin Hospital	DENI	Penrith Community Dialysis Centre	PCDC
Eora Satellite	EORA	Port Macquarie Community	PCOM
Fairfield Satellite	FAIR	Queanbeyan Dialysis Centre	QBEE

Forbes Hospital	FORB	Raymond Terrace	RAYT
Forster Private Hospital Dialysis Unit	FORS	Riverina Nephrology	RIVN
Gosford Satellite	GOSS	Royal Prince Alfred Satellite	RPAS
Goulburn Satellite (Fresenius)	GLBN	Shellharbour	SHEL
Invarell Satellite	INVR	Shoalhaven Satellite (Nowra)	SHOA
Lakehaven Satellite	LAKE	Singleton Satellite	SING
Lanceley Cottage	LANC	Sutherland Hospital	SUTH
Lindfield Dialysis Clinic — Bbraun	LIND	Sydney Dialysis Centre	SYDC
Liverpool Community Centre	LCOM	Wansey Satellite	WANS
Liverpool Hospital	LVPL		

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
John Hunter Hospital Newcastle 2304	HUNT	Sydney Children's Hospital C/- Prince of Wales Hospital Randwick 2031	NEWC
Prince of Wales Hospital Randwick 2031	POWH	The Children's Hospital at Westmead Westmead 2145	
Royal North Shore Hospital St Leonards 2065	RNSH	Westmead Hospital Westmead 2145	WEST
Statewide Renal Services Royal Prince Alfred Hospital Camperdown 2050	SWRS RPAH		
John Hunter Hospital Newcastle 2304	HUNT		

VICTORIA (State Code 3)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Alfred Hospital	ALFD	Malvern Dialysis Centre (Fresenius)	MALV
Austin Health	AUST	Monash Medical Centre – Adult	MMCA
Bendigo Hospital	BEND	Monash Medical Centre – Paediatric	MMCP
Diamond Valley Dialysis Clinic (Diaverum)	GDIA	North Melbourne Dialysis Clinic (Diaverum)	NMDC
Eastern Health Integrated Renal Services	EHRS	North West Dialysis Service	NWDS
Epworth Geelong	EPGL	Northern Health Services Melbourne	NHSM
Epworth Eastern Hospital	EPWT	Royal Melbourne Hospital	RMBH
Epworth Richmond	EPWT	Royal Children's Hospital	RCHL
Forest Hill Dialysis Centre (Fresenius)	FORE	St. Vincent's Hospital	SVIN
Geelong Hospital	GLNG	Sunshine Private Hospital	SNSH
Kew Private Dialysis Centre	KEWP	Western Health	WSTH

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Albury Wodonga Hospital	MANS	Maroondah Satellite	MARO
Angliss Hospital	ALBU	Maryborough District Health Service	MRYB
Ararat Hospital	ANGL	Melton Hospital	MELT
Bairnsdale Hospital	ARAR	Mildura Hospital	MILD
Ballarat Hospital	BAIR	Moorabbin Satellite	MOOR
Box Hill Hospital	BALL	Myrtleford Hospital	MYRT
Broadmeadows Satellite	BOXH	Newcomb Satellite	NCOM
Brunswick Satellite	BRDM	Nhill Hospital Satellite	NHIL

Casey Hospital	BRUN	Northern Hospital	NORT
Casterton Hospital	CASE	Northern Hospital Satellite	NSAT
Caulfield Haemodialysis Centre	CAST	North East Kidney Service	NEKS
Coburg Satellite	CAUL	Orbost Hospital	ORBO
Cohuna Hospital	COBG	Peter James Centre	PJAM
Colac Hospital	COHU	Portland District Health	PORT
Corryong Satellite	COLA	Robinvale Hospital	ROBV
Craigieburn Satellite	CORR	Rosebud Hospital	ROSE
Cranbourne Satellite	CRAI	Sale Hospital	SALE
Dandenong Satellite	CRAN	Sandringham Satellite	SNDR
Daylesford Hospital	DAND	Seymour Hospital	SEYM
Donald Hospital	DAYL	South Geelong Satellite	SGEO
Eastern Health Incentre Dialysis	DONA	St Albans Dialysis Clinic—Fresenius	STAL
Echuca Hospital	EHUB	St. George's Hospital	SGRU
Edenhope Hospital	ECHU	Sunbury Satellite	SUNB
Epping Dialysis Unit	EDEN	Sunshine Satellite Centre	SUNS
Essendon Fields Satellite Dialysis Centre	EPPG	Swan Hill Hospital	SWAN
Frankston Satellite	ESFS	Terang Hospital	TERA
Goulburn Valley Hospital	FRAN	Wagga Hospital	WAGG
Hamilton Hospital	GVAL	Wangaratta Hospital	WANG
Hastings Hospital	HAML	Waragal Hospital	WARA
Healesville Hospital	HSTG	Warnambool Hospital	WARN
Heidelberg Hospital	HEAL	Werribee Mercy Hospital	WERR
Horsham Satellite	HEDG	Western Gippsland Hospital	WGIP
Kyabram Satellite	HORS	Williamstown Satellite	WILL
Kyneton Hospital	KYAB	Wodonga Regional Health Service	WDGA
Latrobe Regional Satellite	KYNE	Wonthaggi Hospital	WONT
Lorne Hospital	LATR	Yarawonga District Hospital	YARA
Mansfield District Hospital	LORN	Yarram Hospital	YARM

VICTORIA (State Code 3) cont.

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Alfred Hospital Commercial Road Prahran 3181	ALFD	Royal Children's Hospital Flemington Road Parkville 3052	RCHL
Austin Health Burgundy Road Heidelberg 3084	AUST	Royal Melbourne Hospital 300 Gratton Street Parkville 3052	RMBH
Monash Medical Centre (Paediatric) 246 Clayton Road Clayton 3165	MMCP	St. Vincent's Hospital 41 Victoria Parade Fitzroy 3065	SVIN

Monash Medical Centre (Adult)
246 Clayton Road
Clayton 3165

MMCA

NORTHERN TERRITORY (State Code 1)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Alice Springs Hospital	ALIC	Royal Darwin Hospital	DARW

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Flynn Drive Satellite	FDVE	Palmerston Satellite	PTON
Katherine Dialysis Unit	KATH	Tennant Creek Hospital	TENN
Nightcliff Community Centre	NTCL	Tiwi Dialysis Centre	TIWI

TASMANIA (State Code 7)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Launceston General Hospital	LAUN	Royal Hobart Hospital	RHBT

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Launceston Community Centre Satellite	LCCS	North West Renal Unit, Burnie	NWRU

AUSTRALIAN CAPITAL TERRITORY (State Code 9)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Canberra Hospital	CANB	Access Nephrology	ACSN

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Belconnen Dialysis Centre	BELC	Tuggeranong Dialysis Centre	TUGG
Canberra Community Satellite	CSAT	Yorke Dialysis Centre	YORK
Northside Dialysis Clinic (Fresenius)	NSID		

NEW ZEALAND (Code 8)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Auckland City Hospital	AUCK	Starship Children's Hospital	STAR
Starship Children's Hospital	STAR	Taranaki Base Hospital	TARA
Christchurch Hospital	CHCH	Waikato Hospital	WKTO
Dunedin Hospital	DUND	Wellington Hospital	WELN
Hawkes Bay Hospital	HAWK	Whangarei Area Hospital	WHAN
Middlemore Hospital	MIDM	Waitemata	WMAT

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Auckland Dialysis Unit	AHOM	Nelson Hospital	NELS
Bay of Islands Hospital	BAYI	Northshore Hospital	NTSH
Carrington Dialysis	CARR	Rotorua Hospital	ROTO
Gisborne Hospital	GISB	Tauranga Hospital	TAUR
Greenlane Self Care Centre	GLNE	Waitakere Satellite	WAIT
Hastings Hospital	HAST	Waitemata Renal Service	WCDC
Kaitaia Hospital	KAIT	Whakatane Hospital	WHAK
Manukau Satellite	MANU		

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Auckland City Hospital Director - Dr Ian Dittmer Park Road Grafton, Auckland	AUCK	Starship Children's Hospital Director - Dr William Wong Park Road Grafton, Auckland	STAR
Christchurch Hospital Director - Dr David McGregor Riccarton Avenue Christchurch	CHCH		

